

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S10	5	threadlike near4 structure same imag\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/01/06 15:07
S11	4	((extract\$4 or obtain\$4 or pull\$3 or gather\$3) near3 (point\$3 or featur\$3)) same ((threadlike or thread\$like) near struct\$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/01/06 15:45
S14	1	(((threadlike or thread\$like) near struct\$4)) same (parent\$3 or child\$5 or ancest\$3 or father\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/01/06 15:15
S11 4	8	threadlike near4 structure same imag\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/01/06 15:10
S11 5	18	(threadlike thread\$like) near4 structure same imag\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/01/06 15:16
S11 6	363866	(mimimal least best short) same (path node\$1)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/01/06 15:13
S11 7	22229	S116 same image	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/01/06 15:13
S11 8	115260	(mimimal best short) same (path)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/01/06 15:15
S11 9	5761	S118 same image	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/01/06 15:15

S12 0	1	S119 same (father\$2 children\$2)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/01/06 15:14
S12 1	13	S119 same (parent\$3 or child\$5 or ancestor\$3 or father\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/01/06 15:15
S12 2	38309	(mimimal best short) near6 (path)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/01/06 15:15
S12 3	1516	S122 same image	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/01/06 15:15
S12 4	3	S123 same (parent\$3 or child\$5 or ancestor\$3 or father\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/01/06 15:15
S12 5	5	S123 same ((extract\$4 or obtain\$4 or pull\$3 or gather\$3) near3 (point\$3 or featur\$3))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/01/06 15:46
S12 6	248	S123 same (point\$3 featur\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/01/06 16:45
S12 7	15	S126 same (predetermin\$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/01/06 16:38
S12 8	7	S126 same (vessel\$3 \$3medical\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/01/06 16:45
S12 9	1608	600/407.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/01/06 16:15

S13 0	422	128/920.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/01/06 16:15
S13 1	2	600/407.ccls. and S126	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/01/06 16:45
S13 2	1	128/920.ccls. and S126	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/01/06 16:45
S13 3	0	("2001/0055413").URPN.	USPAT	OR	ON	2005/01/06 16:18
S13 4	5	382/128.ccls. and S126	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/01/06 16:46
S13 5	7	S126 same (grid\$2 mesh\$2)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/01/06 16:38
S13 6	12	("4866629").URPN.	USPAT	OR	ON	2005/01/06 16:40
S13 7	5	("4596037" "4680627" "4720870" "4754329" "4757550").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/01/06 16:44
S13 8	266	S123 same (point\$3 featur\$3 node\$1)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/01/06 16:46
S13 9	7	S138 same (vessel\$3 \$3medical\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/01/06 16:45
S14 0	2	600/407.ccls. and S138	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/01/06 16:45

S14 1	1	128/920.ccls. and S138	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/01/06 16:45
S14 2	5	382/128.ccls. and S138	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/01/06 16:46
S14 3	26	("5432712").URPN.	USPAT	OR	ON	2005/01/10 15:32

Global Minimum for Active Contour Models: A Minimal Path Approach (1997) (Make Corrections) (31 citations)
 Laurent Cohen, Ron Kimmel

View or download:
ceremade.dauphine.fr/~cohen/TR96.ps.gz
 Cached: [PS.gz](#) [PS](#) [PDF](#) [Image](#) [Update](#) [Help](#)

CiteSeer [Home/Search](#) [Bookmark](#) [Context](#) [Related](#)
[DBLP Metadata](#)

From: ceremade.dauphine.fr/~cohen/TR96.ps.gz
 (more)
[\(Enter author homepages\)](#)

Initialize snakes into a global minimum by using a very optimised algorithm Rate this article: 1 2 3 4 5 (best)
[Comment on this article](#)

Abstract: A new boundary detection approach for shape modeling is presented. It detects the global minimum of an active contour model's energy between two points. Initialization is made easier and the curve cannot be trapped at a local minimum by spurious edges. We modify the "snake" energy by including the internal regularization term in the external potential term. Our method is based on the interpretation of the snake as a path of minimal length in a Riemannian metric, or as a path of minimal cost. We ...
[\(Update\)](#)

Cited by: [More](#)

- Fast Voronoi Diagrams and Offsets - On Triangulated Surfaces [\(Correct\)](#)
- Geodesic Remeshing Using Front Propagation - Gabriel Peyr Laurent [\(Correct\)](#)
- An Optimal Time Algorithm for Shape from Shading - Kimmel And Sethian (2000) [\(Correct\)](#)

Similar documents (at the sentence level): [More](#)

- 59.0%: Global Minimum for Active Contour Models: A Minimal Path Approach - Cohen, Kimmel (1997) [\(Correct\)](#)
- 14.8%: Edge Integration Using Minimal Geodesics - Cohen, Kimmel (1995) [\(Correct\)](#)
- 13.9%: .4 Chapter Summary - Geodesic Formulation [\(Correct\)](#)

Active bibliography (related documents): [More](#) [All](#)

- 0.5: Geodesic Active Contours - Caselles, Kimmel, Sapiro (1995) [\(Correct\)](#)
- 0.4: Affine Invariant Edge Maps and Active Contours - Olver, Sapiro, Tannenbaum (1995) [\(Correct\)](#)
- 0.4: Affine Invariant Detection: Edge Maps, Anisotropic.. - Olver, Sapiro.. [\(Correct\)](#)

Similar documents based on text: [More](#) [All](#)

- 0.5: Expert Constrained Clustering: a Symbolic Approach - Rossi, Vautrain (2000) [\(Correct\)](#)
- 0.4: Minimal Paths in 3D Images and Application to Virtual Endoscopy - Deschamps, Cohen [\(Correct\)](#)
- 0.3: The Multiconfiguration Methods in Quantum Chemistry - Ceremade [\(Correct\)](#)

Related documents from co-citation: [More](#) [All](#)

- 18: Snakes: active contour models (context) - Kass, Witkin et al. - 1987
- 18: Geodesic active contours - Caselles, Kimmel et al. - 1995
- 12: Level Set Methods: Evolving Interfaces in Geometry (context) - Sethian - 1996

BibTeX entry: [\(Update\)](#)

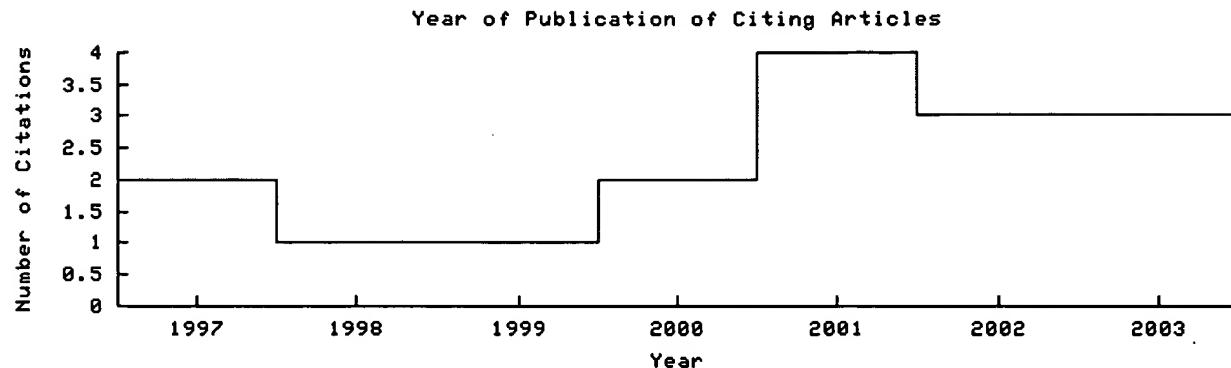
Cohen, L.D., and Kimmel, R., 1997. Global Minimum for Active Contour Models : A Minimal Path Approach. International Journal of Computer Vision. <http://citeseer.ist.psu.edu/article/cohen97global.html> [More](#)

```
@misc{ cohen97global,
    author = "L. Cohen and R. Kimmel",
    title = "Global Minimum for Active Contour Models : A Minimal Path Approach",
    text = "Cohen, L.D., and Kimmel, R., 1997. Global Minimum for Active Contour Model
          : A Minimal Path Approach. International Journal of Computer Vision.",
    year = "1997",
    url = "citeseer.ist.psu.edu/article/cohen97global.html" }
```

Citations (may not include all citations):

- 1267 Snakes: Active contour models (context) - Kass, Witkin et al. - 1988
- 895 A computational approach to edge detection - Canny - 1986

278 Geodesic active contours - Caselles, Kimmel et al. - 1995
 196 Shape modeling with front propagation: A level set approach - Malladi, Sethian et al. - 1995
 184 User's guide to viscosity solutions of second order partial .. (context) - Crandall, Ishii et al. - 1992
 168 Finite element methods for active contour models and balloon.. - Cohen, Cohen - 1993
 133 Using dynamic programming for solving variational problems i.. (context) - Amini, Weymouth et al. - 1990
 123 A level set approach for computing solutions to incompressib.. (context) - Sussman, Smereka et al. - 1994
 112 A fast level set method for propagating interfaces - Adalsteinsson, Sethian - 1995
 98 Distance transformations in arbitrary dimensions (context) - Borgefors - 1984
 87 Surface modeling with oriented particle systems - Szeliski, Tonnesen - 1992
 83 A viscosity solutions approach to shape-from-shading (context) - Rouy, Tourin - 1992
 81 Fronts propagation with curvature dependent speed: Algorithm.. (context) - Osher, Sethian - 1988
 74 A fast marching level set method for monotonically advancing.. - Sethian - 1996
 72 Gradient flows and geometric active contour models - Kichenassamy, Kumar et al. - 1995
 59 A geometric model for active contours (context) - Caselles, Catt'e et al. - 1993
 49 Detection of roads and linear structures in low-resolution a.. (context) - Fischler, Tenenbaum et al. - 1981
 48 Structural saliency: The detection of globally salient struc.. - Shaashua, Ullman - 1988
 47 An active testing model for tracking roads in satellite imag.. - Geman, Jedynak - 1993
 40 A review of recent numerical algorithms for hypersurfaces mo.. (context) - Sethian - 1989
 37 Evolutionary fronts for topology-independent shape modeling .. (context) - Malladi, Sethian et al. - 1994
 34 Finding shortest paths on surfaces using level sets propagat.. (context) - Kimmel, Amir et al. - 1995
 31 the optimal detection of curves in noisy pictures (context) - Montanari - 1971
 31 Euclidean distance mapping (context) - Danielsson - 1980
 27 Algorithms for implicit deformable models - Whitaker - 1995
 27 and Image Processing: Image Understanding (context) - Cohen, contour et al. - 1991
 25 Modern Geometry - Methods and Applications (context) - Dubrovin, Fomenko et al. - 1984
 24 Image segmentation by reaction-diffusion bubbles - Tek, Kimia - 1995
 20 An optimal control formulation and related numerical methods.. (context) - Dupuis, Oliensis - 1994
 20 Machine Vision and Applications (context) - Fua, Leclerc et al. - 1990
 19 Vector-valued active contours (context) - Sapiro - 1996
 19 Auxiliary variables and two-step iterative algorithms in com.. - Cohen - 1996
 17 Medical image segmentation using topologically adaptable sna.. - McInerney, Terzopoulos - 1995
 17 Minimal surfaces: a three dimensional segmentation approach - Caselles, Kimmel et al. - 1995
 16 Estimating shortest paths and minimal distances on digitized.. (context) - Kiryati, Sz'ekely - 1993
 14 Recovery of shapes by evolution of zero-crossings (context) - Shah - 1995
 14 On matching deformable models to images: Direct and iterativ.. (context) - Terzopoulos - 1987
 13 Fast marching method for computing solutions to static Hamil.. (context) - Adalsteinsson, Kimmel et al. - 1996
 11 Distance maps and weighted distance transforms (context) - Kimmel, Kiryati et al. - 1996
 11 Adaptive active contour algorithms for extracting and mappin.. (context) - Davatzikos, Prince - 1993
 10 A curvature dependent energy function for detecting lines in.. - Merlet, Zerubia - 1993
 9 Planning and reasoning for autonomous vehicle control (context) - Mitchell, Payton et al. - 1987
 8 and Image Processing (context) - Bruckstein, from et al. - 1988
 7 Dynamic segmentation: Detecting complex topology 3D-object (context) - Leitner, Cinquin - 1991
 7 Curvature and continuity control in particlebased surface mo.. (context) - Szeliski, Tonnesen et al. - 1993
 6 Making snakes converge from minimal initialization - Neuenschwander, Fua et al. - 1994
 6 Chamfer masks: discrete distance functions (context) - Thiel, Montanvert - 1992
 6 the eikonal equation solved by gray-weighted distance transf.. (context) - Verbeek, Verwer et al. - 1990
 5 Finding shortest paths on surfaces by fast global approximat.. - Kimmel, Kiryati - 1994
 5 Data structures for operations on digital images (context) - Rutovitz - 1968
 4 A unified framework for shape segmentation representation (context) - Malladi, Sethian - 1994
 4 New prospects in line detection for remote sensing images - Merlet, Zerubia - 1994
 3 Fast marching methods for computing distance maps and shorte.. (context) - Kimmel, Sethian - 1996
 3 Global minima via dynamic programming: Energy minimizing act.. (context) - Chandran, Meajima et al. - 1991
 1 Motion tracking of deformable objects based on energy minimi.. (context) - Fujimura, Yokoya et al. - 1992



The graph only includes citing articles where the year of publication is known.

Documents on the same site (<http://www.ceremade.dauphine.fr/~cohen/recentpub.html>): [More](#)
Tracking medical 3D data with a parametric deformable model - Bardinet, Cohen, Ayache (1995) [\(Correct\)](#)
Cardiac Wall Tracking Using Doppler Tissue Imaging (DTI). - Cohen, PAJANY, PELLERIN.. (1996) [\(Correct\)](#)
Snakes: Sur La Convexité De La Fonctionnelle.. - Cohen, GORRE [\(Correct\)](#)

[Online articles have much greater impact](#) [More about CiteSeer.IST](#) [Add search form to your site](#) [Submit documents](#) [Feedback](#)

CiteSeer.IST - Copyright Penn State and NEC